

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008813**Date Inspected:** 27-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1845**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 715**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Fabrication**Summary of Items Observed:**

CWI Inspectors: Mr. Chen Xi, Mr. Shen Fu You, Mr. Li Young

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

**OBG Bay 2**

This QA Inspector observed ZPMC welder Mr. Xu Fubao, stencil 200569 is using shielded metal arc process WPS-B-P-2112 to tack weld OBG floor beam groove weld FB3067-001-007. This QA Inspector observed a welding current of approximately 125 amps, the base material is clean where the tack welds were being made and Mr. Xu Fubao is certified to make this weld. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch. Items observed on this date appeared to generally comply with applicable contract documents.

**OBG Bay 4**

This QA Inspector observed ZPMC welder Mr. Li Yuan Zheng, stencil 0217185 is using flux cored welding process WPS-B-T-2133-B-U2-F to make flux cored groove weld TR10C-007-003. The QA Inspector measured a welding current of approximately 300 amps and 29.6 volts. QA Inspector observed the weld groove appears to be

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clean and the root gap and groove angles appear to comply with the welding procedure. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Gao Yulin, stencil 217805 is using flux cored welding process WPS-B-T-2133-B-U2-F to make flux cored groove weld TR10C-004-003. The QA Inspector measured a welding current of approximately 300 amps and 27 volts. QA Inspector observed the weld groove appears to be clean and the root gap and groove angles appear to comply with the welding procedure. This QA Inspector observed Ms. Gao Yulin is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Song Aiying is using flux cored welding process WPS-B-T-2133-B-U2-F to make flux cored groove weld TR12C-004-003. The QA Inspector measured a welding current of approximately 300 amps and 31 volts. QA Inspector observed the weld groove appears to be clean and the root gap and groove angles appear to comply with the welding procedure. This QA Inspector observed Ms. Song Aiying is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

### OBG Bay 9

This QA Inspector observed ZPMC welder Mr. Xu Guoyin, stencil 059443, is using welding procedure WPS-B-T-2342-U2 (U-rib) to make flux cored weld DP3026-001-329. This weld attaches a stiffener plate to the inside of closed rib for OBG deck panel DP3026-001. This QA Inspector observed the base material had been cleaned of oxides where the stiffener welds are to be installed. This QA Inspector observed a welding current of approximately 205 amps 27.5 volts and Mr. Xu Guoyin is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

### OBG Bay 14

This QA Inspector observed ZPMC welder Ms. Ma Ying stencil 045270, is using welding procedure specification WPS-B-T-2221-B-L2C-S-2 to make submerged arc groove weld SEG049\*-001 between deck plate DP284-001 and deck plate DP122-001. This QA Inspector observed ZPMC Quality Control personnel monitoring this welding and this QA Inspector observed a welding current of approximately 530 amps and 33.0 volts and Ms. Ma Ying is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

See above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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